

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
21 April 2005 (21.04.2005)

PCT

(10) International Publication Number  
**WO 2005/035841 A2**

(51) International Patent Classification<sup>7</sup>: **D01F**

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(21) International Application Number:  
PCT/US2004/033602

(22) International Filing Date: 12 October 2004 (12.10.2004)

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(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/510,707 10 October 2003 (10.10.2003) US

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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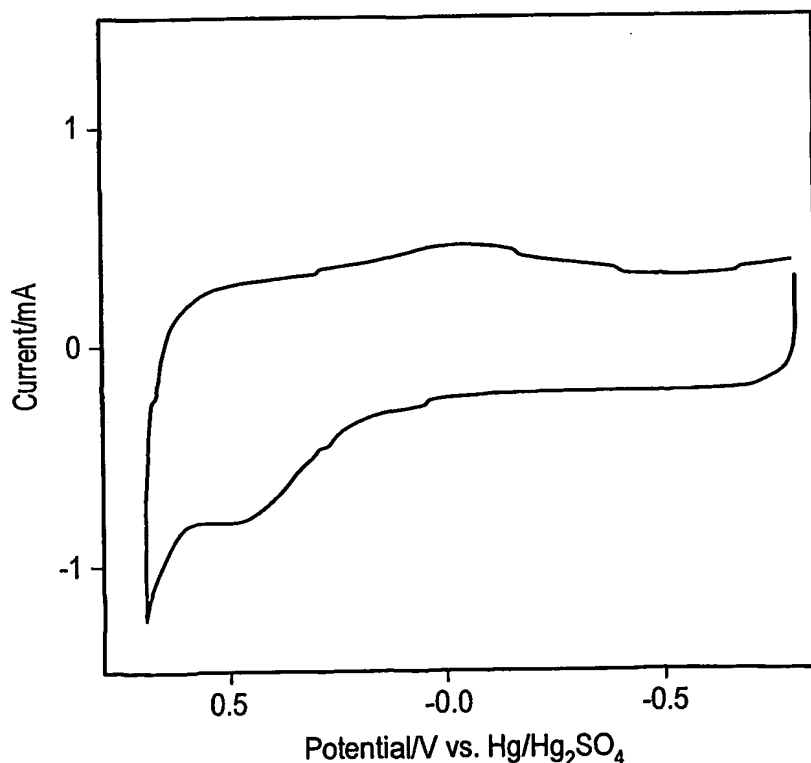
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[Continued on next page]

(54) Title: CARBON NANOSTRUCTURE-BASED ELECTROCATALYTIC ELECTRODES



(57) Abstract: Carbon nanostructure (e.g., CNF) electrodes disclosed herein may be conveniently prepared on conductive substrates by pyrolysis of an organometallic nanostructure precursor in a reducing atmosphere. Such electrodes may possess suitable properties for preparation of electrocatalytic electrodes and electrochemical sensors. High surface area nitrogen doped CNFs prepared according to certain embodiments are conductive and may exhibit high stability and improved catalytic activity for O<sub>2</sub> reduction in aqueous solutions.



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— *without international search report and to be republished upon receipt of that report*

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